

From: jerimiah.booream@ubs.com
Sent: Thur 6/1/2017 11:30:08 AM
Subject: UBS: NRG: Moving to the Next Stage: Upgrading to Buy (\$20 PT)
[disclaim.txt](#)

If you have found our research to be valuable, we would appreciate your consideration for both the Electric Utilities and Alternative Energy categories in the upcoming Institutional Investor (II) survey.



Please vote for **Julien Dumoulin-Smith** in both categories: **(1) Electric Utilities & (2) Alternative Energy** in the 2017 All-America Equity Research Team II Survey. [How To Vote](#) | [Analyst Roster](#)

NRG Energy Inc.

Moving to the Next Stage: Upgrading to Buy

Please Click Here for the Full Note

Upgrading to Buy; Magnitude of cost cuts remains central to the story

We are upgrading NRG to Buy as the GenOn settlement and the latest PJM auction add clarity to the story while the cost cutting thesis remains intact and the major near term catalyst for the stock. While the deadline for the review is set for Aug 14, we expect more details to transpire sooner and could well see mgmt. update 2017 guidance in the coming weeks given the added clarity provided by the GenOn settlement. We continue to assume \$140 Mn of cost cuts related to unallocated expenses as well as the complete offset of the GenOn dis-synergies (~\$100 Mn) in our base case valuation and see further savings potential within the retail and renewable segments.

GenOn settlement constructive for NRG as move beyond legacy portfolio

We see the proposed GenOn settlement as positive, as the ~\$150 Mn net cash contribution (plus the assumption of the ~\$120 Mn underfunded pension plan) is lower than many investors feared given the tangible threats of substantial litigation, notably related to the Shared Services

Agreement and previous asset transfers. Under the settlement, NRG would be fully released from any obligations and the noteholders would drop all litigation with NRG. With the GenOn RSA now garnering more than 90% support among both GAG and GEI noteholders, we expect the proposed plan to be implemented within the next 4-6 months (see our full review of the RSA here).

PJM Auction now behind; adds further clarity

The recent PJM auction removes yet another uncertainty for the stock. Despite a headline RTO number down ~24% YoY, NRG ex-GenOn cleared most if not all of its assets, and the negative impact on revenue was mitigated by the exposure to higher-priced regions. Further, with the company splitting from GenOn, NRG is decreasing its exposure to lower-priced regions such as PEPCO and MAAC and becoming more of a EMAAC play (~84% of pro forma PJM capacity) which was able to retain its premium pricing in the last auction at ~\$188/MW-day (see our related notes here and here).

Valuation: Upgrade to Buy, Increase PT to \$20/Sh; awaiting guidance update

We are upgrading NRG to Buy and increasing our PT by \$1 to \$20/Sh as we mark-to-market our power and gas price assumptions and include the impact of the GenOn settlement (cash contribution and pension assumption). Our valuation remains based on a 2020E SOTP.

Buy (Price target US\$20.00)

NRG Energy Inc.

UBS Research a guide to our thinking and what's where in this
THESIS MAP report

PIVOTAL Q: What is the cost savings opportunity?
QUESTIONS

NRG's relative O&M and SG&A expenses seem larger than peers at first sight. While we believe this is partly explained by the differentiated business model (large retail operation, large renewable portfolio), we believe there is room to reduce these expenses. Specifically, mgmt. has indicated \$140 Mn of unallocated expenses will essentially go away in the 2018 timeframe. Additionally, mgmt. is confident it can offset a substantial portion of the synergy losses associated with the GenOn separation, which we estimate at ~\$100 Mn. While we include these two items in our base valuation as we see these as the most tangible cuts so far, we could see further savings potential on the retail and renewable front. We expect further clarity at the formal BRC deadline on Aug 14, if not earlier.

moreg

Q: Is the GenOn settlement a good outcome for NRG?

We believe the \$150 Mn net cash contribution and the assumption of ~\$120 Mn of pension liability as part of the settlement with noteholders is a positive for NRG as that amount is lower than many investors feared given the tangible threats of substantial litigation, notably related to the Shared Services Agreement and previous asset transfers. The main question remains the extent to which the company can cope with losing the Shared Services Agreement; the company remains confident it can offset a significant portion of the loss.

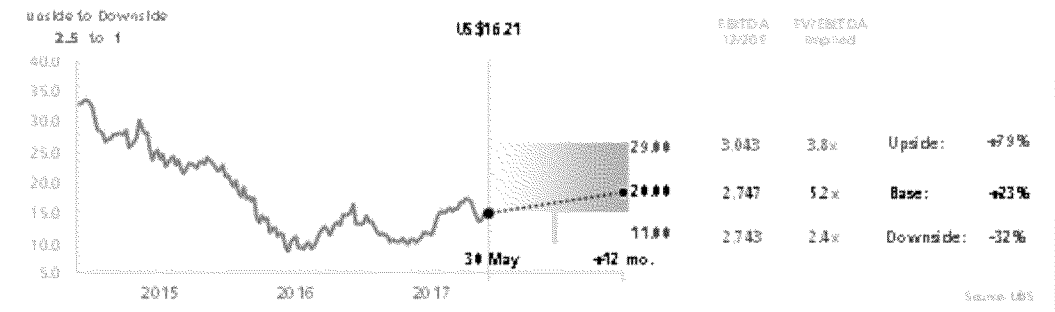
moreg

UBS VIEW With the GenOn overhang likely to be resolved in the near future given the 90+% RSA support, and with the latest PJM auction past us, we believe the story has become substantially clearer and now comes down to the findings of the Business Review Committee (BRC). We believe the stock has come down substantially from its highs in mid-April (see chart below) as mgmt. had been a bit more cautious on the magnitude of potential cost savings than many had anticipated on their recent 1Q call. While the shares have partially recovered since on the back of the broader power sector, we see incremental upside to NRG equity valuations given the more modest expectations baked into the shares.

EVIDENCE Mgmt. recently provided its cost structure and comparisons, presenting the company favorably vs. peers on an O&M plus SG&A plus maintenance capex per kW basis. We see benchmarking as skewing constructively on cost cuts. We assume ~\$240 Mn cost savings in our base valuation.

WHAT'S PRICED IN? The market is giving NRG little credit to its ability to achieve significant cost savings. At current prices, the market implies ~\$100 Mn of cost cuts vs. the ~\$240 Mn estimate in our valuation.

**UPSIDE /
DOWNSIDE
SPECTRUM**



Value drivers	2020E EV/EBITDA Multiple	Cost Savings (\$Mn)	NYLD per NRG Shares	Value
---------------	--------------------------	---------------------	---------------------	-------

\$11

\$29 upside	8.7x	\$380	\$5.08
\$20 base	7.3x	\$240	\$4.81
downside	6.1x	\$100	\$4.54

Source: UBS

[more g](#)

COMPANY NRG Energy, Inc. (NRG) operates one of the largest independent power
DESCRIPTION generation portfolios and retail electricity businesses in the US. NRG controls
over 46GW of power generation...

[more g](#)

NRG Energy Inc.

UBS Research

COMMENTARY

[return](#) Ó

What Do We Think of the Shares?

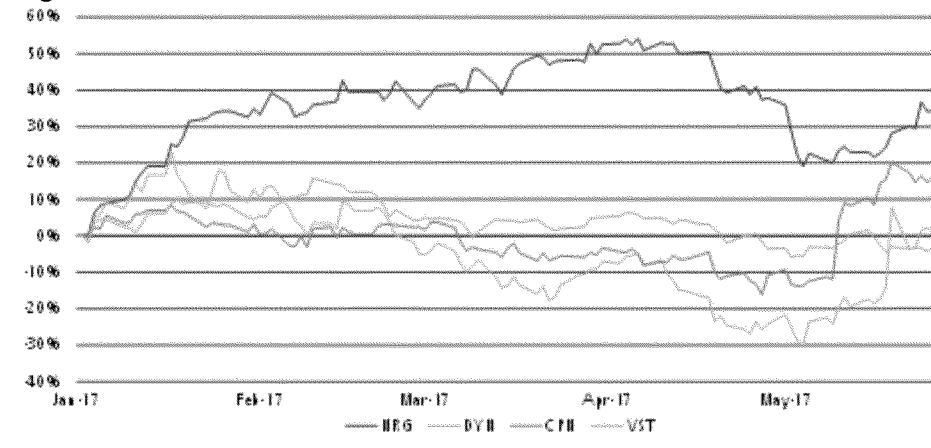
With the GenOn overhang poised to be resolved in the near future given the 90+% RSA support, and with the latest PJM auction past us, we believe the story has become substantially clearer and now comes down to the findings of the Business Review Committee (BRC), more specifically how much cost savings can be realized and what is the strategic direction for the Renewable business and ownership of NYLD. While the official deadline for the BRC remains Aug 14, we'd expect more tangible details to likely emerge within a shorter timeframe. Specifically, we look for mgmt. to formally update guidance and provide an updated view of their strategy and costs outlook ex-GenOn in the near term.

We believe the stock has come down substantially from its highs in mid-April (see chart below) as mgmt. had been a bit more cautious on the magnitude of potential cost savings than many had anticipated on their recent 1Q call. While the shares have partially recovered since on the back of the broader power sector, we see incremental upside to NRG equity valuations given the more modest expectations baked into the shares. Indeed, current levels imply cost savings of only ~\$100 Mn vs. the ~\$240 Mn estimate in our valuation (the previously announced \$140 Mn of unallocated expenses, plus the offset of the GenOn dis-synergies, which mgmt. is confident it can achieve), and a far cry from the \$1 Bn estimate some investors have been contemplating.

Furthermore, we perceive an upside skew on NYLD. While mgmt. has expressed its commitment to the YieldCo and its renewable business thus far, we see pressures to divest the portfolio as part of the cost evaluation process, as a divestment would notably allow the company to cut on

development expenses (\$90 Mn in 2016). The question remains whether the company would be able to sell NYLD at a premium to current levels; as NRG uses the YieldCo as a growth platform, we doubt the company would part with NYLD unless a substantial premium is realized. We further note the recent consolidation in the space (TERP being acquired by Brookfield, FSLR selling its interest in CAFD, and ABG in the process of selling its ~42% stake in ABY) is also constructive.

Figure 1: YTD Stock Performance



Source: FactSet

What are the key issues that have been resolved?

We note the following developments in recent months that augur well for shares aside for the forthcoming guidance updates.

- **VST's retail value readthrough:** We see the healthy valuation embedded in shares reflects well upon confidence in retail valuations and presents a clear valuation readthrough back to NRG. We expect valuation methodologies and implied EV/EBITDA to converge over time. We note our Sell rating on VST is embedding the same underlying valuation multiples that our NRG upgrade below is embedded upon including potential cost synergies from both.
- **PJM de-risking:** With NRG's stand-alone prospects now largely oriented in ComEd, we see a certain degree of resiliency in pricing. Overall, we see an ability now to *expand* pback into PJM should the company so choose, enabling yet another strategic angle in the future. Any such move would likely be accompanied by corresponding corporate synergies and re-enabling of corporate synergies
- **Private value bid for IPPs?** We note that the bid for Calpine has reinvigorated a willingness to value IPP assets of all flavors; we see NRG as a potential beneficiary of this lower discount rate.
- **Focused on cost reductions—and market improvement:** We emphasize that both NRG and peers will continue to look at both O&M and SG&A, both improving their EBITDA

projections, likely in the near-term with updated pro-forma GenOn update (potentially in the next several days) but also in likely tightening up the ERCOT market. We note sparks have begun to shift back upwards as reflected in our updated estimates.

- **GenOn resolution:** We see shares as de-risked around the resolution here with both a figure well within Street expectations as well as seeming clean move away without protracted litigation around peripheral issues (such as previous asset transfers to NYLD, etc).

The Question on Cost Reductions

We emphasize cost reductions remain a clear focus for mgmt. into any updated guidance without GenOn as well as into the 2Q BRC update. We caution that updates could well involve both costs to achieve as well as an extended timeline to achieve ultimate savings. We also emphasize the importance of noting EBITDA and capital improvements in prospects. Further, we see asset retirements and divestments as critical to this overall repositioning, specifically around its Texas wholesale portfolio which appears to generate material negative FCF on an open basis. While we may not get the full cost updates in coming weeks with the pro-forma GenOn outlook this should provide an early indication of where these factors are headed. While mgmt. cautioned with 1Q on how it wanted to position its total cost cuts, we see our \$20 PT as predicated on simply the offsetting of GenOn costs as well as the \$140 Mn in Corporate SG&A, well below the contemplated cuts expected across the Street.

Updated Valuation: Increase PT to \$20/Sh

We are upgrading to Buy and increasing our price target by \$1 to \$20/Sh. We continue to include **\$240 Mn of cost savings associated with the BRC**, including the \$140 Mn of Corporate SG&A cuts as well as assuming the loss of GenOn will not result in any corresponding dis-synergies, which represents a ~\$100 Mn of improvement in cost structure to re-assign and reduce the allocated portion of the cost savings. Our valuation remains based on a 2020E SOTP. The \$1/Sh price target increase is explained by the following factors:

- Including the ~\$261 Mn cash contribution as well as ~\$120 Mn underfunded GenOn pension plan liability NRG will assume as part of the GenOn settlement.
- Marking-to-market our power and gas price assumptions to reflect the latest forward curves (resulting in 2020E EBITDA increase of ~\$120 Mn all else equal) and NYLD stock price increase from \$17.50 to \$17.78.
- Compared to our previous iteration, we are now formally excluding all GenOn-related items, including \$112 Mn of operating leases payments, \$89 Mn of 2019E EBITDA, the \$2,525 Mn of non-recourse debt, the \$929 Mn PV of operating leases, as well as \$1,034 Mn of cash. Note that this does not affect our valuation as we were already adding back the negative GenOn equity value (~\$3.50/Sh).

- We also combined our Northeast and EME lines (excluding the Trading segment, which we continue to capitalize at a lower multiple) under the new Northeast/Midwest line, with no effect on the overall valuation.

Figure 2: Updated SOTP Valuation

NRG Energy Valuation		2020E EBITDA		EV/EBITDA Multiple			Enterprise Value (\$)	
		Low	Prem./ Discount	Base	High	Low	Base	
Base IPP Multiple =				8.0x				
Texas	12	7.0x	0.0x	8.0x	9.0x	86	98	
South Central	41	7.0x	0.0x	8.0x	9.0x	290	331	
Northeast/Midwest	278	7.0x	0.0x	8.0x	9.0x	1,949	2,227	
EMMT (Trading)	32	5.0x	-2.0x	6.0x	7.0x	158	189	
West (All-Inclusive)	68	5.0x	-2.0x	6.0x	7.0x	341	409	
Renew (Ex-Ivanpah)	230	10.0x	3.0x	11.0x	12.0x	2,297	2,527	
Retail Businesses (Reliant, GM, E+, D)	704	5.0x	-2.0x	6.0x	7.0x	3,522	4,227	
Other, Corporate, and Unallocated								
Synergies	506	6.0x	-1.0x	7.0x	8.0x	3,033	3,539	
Cost Savings	140		-1.0x	7.0x		-	980	
Total / Implied	2,011	5.8x	-0.8x	7.2x	8.6x	11,675	14,527	
Net Debt and Other: 12/31/16								
NRG Recourse Debt						(7,795)	(7,795)	
EME PV Operating Leases						(88)	(88)	
GenOn Settlement Cash Contribution						(261)	(261)	
GenOn Underfunded Pension Plan						(120)	(120)	
Other Conventional Debt (Non-Recourse)						(238)	(238)	
Solar Non-Recourse Debt (Ex. Ivanpah)						(1,736)	(1,736)	
Cash						939	939	
NPV of Equity using Hedged EBITDA Methodology						2,376	5,228	
Open Analysis								
Power Hedges	(92)	6.2x		7.2x	8.2x	(572)	(664)	
Total						(572)	(664)	
add NPV of Power Hedges							357	
NPV of Equity using Open EBITDA Methodology						2,160	4,920	
NYLD Class A & C Average Share Price						16.78	17.78	
NYLD Equity Value						1,434	1,520	
\$/share for NRG Energy (85Mn Shares Owned (B & D))						4.54	4.81	
Estimated 2020 Shares Outstanding						316	316	
Equity value per share						\$11.00	\$20.00	

Source: Company Filings, FactSet, UBSe

Updated EBITDA Estimates

We include below our updated EBITDA estimates, which we marked to market to reflect the latest power and gas forward curves. We are now formally excluding GenOn from our estimates starting in 2018. Additionally, we continue to expect 2017E EBITDA towards the low end of the range at ~\$2,740 Mn, plus an estimated \$70 Mn in cost savings.

Figure 3: Updated EBITDA Estimates

NRG Energy EBITDA (\$Mn)	2015A	2016A	2017E	2018E	2019E	2020E
Texas	470	204	86	30	8	12
South Central	118	136	123	36	45	41
Northeast/Midwest	1,034	711	239	326	336	310
West	102	219	120	71	68	68
NYLD Eligible	171	187	139	197	241	260
NYLD	720	899	920	797	796	796
<i>Guidance</i>	705	885	920			
Retail Businesses	739	811	705	700	702	704
<i>Guidance</i>	700-750	725-775	700-780			
<i>Less Hedge Monetization</i>			(98)			
Corporate, Other, and Unallocated Synergies	(97)	(77)	506	506	506	506
Cost Savings			70	140	140	140
NRG Adj. EBITDA (UBSe)	3,317	3,257	2,809	2,802	2,841	2,838
<i>Prior EBITDA Est. (UBSe)</i>	<i>3,376</i>	<i>3,257</i>	<i>2,782</i>	<i>2,975</i>	<i>2,867</i>	<i>2,747</i>
Consensus EBITDA Est. (05/30/17)			2,728	2,876	2,836	2,705
GenOn EBITDA Est. (Excl.)			144	228	89	(20)

Source: Company Filings, FactSet, UBSe

NRG Energy Inc.

UBS Research

PIVOTAL QUESTIONS

Q: What is the cost savings opportunity?

UBS VIEW

NRG's relative O&M and SG&A expenses seem larger than peers at first sight. While we believe

return 

this is partly explained by the differentiated business model (large retail operation, large renewable portfolio), we believe there is room to reduce these expenses. Specifically, mgmt. has indicated \$140 Mn of unallocated expenses will essentially go away in the 2018 timeframe. Additionally, mgmt. is confident it can offset a substantial portion of the synergy losses associated with the GenOn separation, which we estimate at ~\$100 Mn. While we include these two items in our base valuation as we see these as the most tangible cuts so far, we could see further savings potential on the retail and renewable front. We expect further clarity at the formal BRC deadline on Aug 14, if not earlier.

EVIDENCE

The \$140 Mn of unallocated expenses classified as Corporate Overhead are for the most part associated with resi solar, a business NRG is winding down, thus giving us confidence these costs will be substantially reduced or eliminated by 2018.

WHAT'S PRICED IN?

The market is giving NRG little credit to its ability to achieve significant cost savings. At current prices, the market implies ~\$100 Mn of cost cuts vs. the ~\$240 Mn estimate in our valuation.

Cost analysis by segment

We include two main sources of cost savings in our valuation:

- The \$140 Mn of NRG Corporate expenses are unallocated expenses, which are largely associated with the Resi Solar business NRG is winding down. Other items include the stadium naming rights which expire in 2032. We stress these are the most tangible cost cuts so far as mgmt. assures these expenses will essentially go away in the 2018 timeframe. We assume the full \$140 Mn of savings in our base valuation.
- The \$208 Mn of GenOn SG&A cost is mainly composed of the ~\$193 Mn shared services payment, and we estimate ~\$100 Mn of that is NRG cost allocated to GenOn. With the company splitting from GenOn, mgmt. remains confident it can offset a substantial part of the synergy loss through cost cutting and redundancy elimination measures. We assume \$100 Mn of savings in our base valuation.

We further highlight the following points:

- We contrast Renew's cost relative to NYLD's, particularly on an SG&A/kW basis which is almost tenfold for Renew at ~\$29/kW vs. \$3.4/kW for NYLD. We suspect the discrepancy is likely due to the at-cost services agreement between NRG and the yieldco, as well as the more expensive Ivanpah. Further development opportunities remain also exclusively within the purview of NRG the parent sponsor; while the bulk of development costs are reflected in a separate 'development line item, there are still costs allocated to Renew for this purchase. While we don't exclude some cost re-allocation in the future, we doubt it would be implemented given

the valuation arbitrage at NYLD. Regardless, the size of Renew (\$60 Mn SG&A for ~\$200 Mn total cost) somewhat limits the scale of any potential savings. In any event, we emphasize the main question remains how NYLD fits into NRG's overall strategy; we note mgmt. continually stresses the importance of a strong and growing renewable pipeline, with NYLD as its centerpiece as a platform to monetize assets and capitalize on the fundamentals of the industry.

- How much savings can be achieved at the Retail segment remains the main unknown (\$800+ Mn of total costs in 2016, and ~half of the company's consolidated SG&A). A future question as part of NRG's cost mgmt. reductions remains whether costs specific to the retail effort to focus more narrowly on just the incumbent portfolio rather than retaining low margin customers via costly customer acquisition and retention efforts merits the effort. A further question is to what extent the expensive marketing arrangement in place maintains the brand recognition necessary to ensure legacy customers remain. We see this as a secondary angle in the cost reduction exercise.

Figure 4: Cost Analysis

	Capacity Generation		2016A Costs (\$Mn)			\$/kW			\$/MWh	
	(MW)	(TWh, 2016)	Total O&M	SG&A	Total	O&M	SG&A	Total	O&M	SG&A
Consolidated NRG	49,850	105.9	2,566	1,101	3,667	\$43.4	\$22.1	\$13.6	\$20.4	\$10.4
NRG Corporate	114	0.0	16	156	140					
Retail	0	0.0	341	497	838					
Renew	2,053	3.9	141	60	201	\$68.7	\$29.2	\$97.9	\$36.3	\$15.5
NYLD	4,692	11.2	239	16	255	\$50.9	\$3.4	\$54.3	\$21.4	\$1.4
GenOn	16,423	26.0	639	206	847	\$38.9	\$12.7	\$51.6	\$24.6	\$8.0
Core Generation	26,682	64.9	1,222	164	1,386	\$45.8	\$6.1	\$51.9	\$18.8	\$2.5
Gulf Coast	14,085	51.1	693			\$49.2			\$13.6	
East	9,562	9.5	515			\$53.8			\$54.4	
West	2,286	4.4	28			\$12.3			\$6.5	
Other and Eliminations	749		14							

Notes:

Total O&M includes Other Cost of Ops which includes ARO exp., insurance, property and other taxes

NYLD capacity excludes Thermal (1,645 MW)

Gulf Coast, East and West capacity exclude GenOn

Assumes GenOn Total O&M costs are allocated 80/20 to Core Generation's East and West segments

Development expenses (\$90 Mn in 2016) are not included

Source: Company Filings, UBSe

How does it look vs. peers now?

We benchmark below NRG Core Generation and GenOn against the IPP peers, CPN and DYN. Overall, we are increasingly cautious on the potential for expectations to meet material cost cutting on the Core Generation side as we believe the \$8-9/MWh higher total cost vs. peers mostly stems from characteristics of the portfolio itself rather than inefficiencies. See our latest transcript on the subject as well with ex-GenOn CEO Ed Muller.

- Indeed, while NRG Core Generation O&M/kW is higher than its peers at ~\$46/kW vs.

~\$37/kW, we suspect this is explained by the fleet itself: DYN and particularly CPN have a greater concentration of CCGTs which are cheaper to operate, while NRG Core Generation's portfolio is mainly composed natural gas steam turbine, oil, and coal-fired power plants.

■... NRG Core Generation SG&A/kW is sensibly similar to peers at \$6.1/kW vs. \$5.9/kW average for CPN and DYN. We again highlight GenOn's seemingly inflated SG&A which stands at ~double that of NRG Core Generation and the IPP peers on a \$/kW basis. We suspect some of the difference could be explained by different cost allocation between O&M and SG&A at GenOn vs. Core Generation given the similar total expense levels.

■... NRG's maintenance CapEx seemed skewed towards GenOn in 2016, with more than 2/3 of the work performed at the sub. We note GenOn's maintenance CapEx is expected to decrease ~in half to \$109 Mn in 2017. Further, we highlight NRG's total maintenance CapEx (Core Generation plus GenOn) is substantially lower than its peers at ~\$7/kW vs. low teens.

Figure 5: IPP Cost Benchmarking Across the Various Line Items

	Core Generation	GenOn	CPN	DYN	Avg. CPN/DYN	Δ NRG
Operations						
Operating Capacity (MW)	26,682	16,423	25,908	25,314	25,611	
Total Generation (TWh)	64.9	26.0	105.5	101.1	103.3	
Average Capacity Factor (%)	28%	18%	46%	46%	46%	
Total O&M						
O&M (\$Mn)	1,222	639	977	940	959	
O&M / Capacity (\$/kW)	\$45.8	\$38.9	\$37.7	\$37.1	\$37.4	
O&M / Generation (\$/MWh)	\$18.8	\$24.6	\$9.3	\$9.3	\$9.3	
SG&A						
SG&A Expenses (\$Mn)	164	208	140	161	157	
SG&A / Capacity (\$/kW)	\$6.1	\$12.7	\$5.4	\$6.4	\$5.9	
SG&A / Generation (\$/MWh)	\$2.5	\$8.0	\$1.3	\$1.6	\$1.5	
Maintenance CapEx						
SG&A Expenses (\$Mn)	93	205	405	253	329	
SG&A / Capacity (\$/kW)	\$3.5	\$12.5	\$15.6	\$10.0	\$12.8	
SG&A / Generation (\$/MWh)	\$1.4	\$7.9	\$3.8	\$2.5	\$3.2	
Total Expenses						
Total Expenses (\$Mn)	1,479	1,052	1,522	1,354	1,438	
Total Exp / Capacity (\$/kW)	\$55.4	\$64.1	\$58.7	\$53.5	\$56.1	
Total Exp / Generation (\$/MWh)	\$22.8	\$40.5	\$14.4	\$13.4	\$13.9	

Notes:

CPN data is for the whole company (including retail segment)

DYN data excludes Engie assets

Source: Company Filings, UBSe

Comparing Fleets

We include below a fleet comparison by fuel and ISO and again highlight NRG Core

Generation's greater concentration of gas ST and oil-fired power plants vs. peers. We highlight the DYN data excludes the Engie assets; once included, the proportion of CCGTs in the portfolio will increase by ~10 points at the expense of coal, while the exposure to ERCOT will rise from 0% to 15%, at the expense of CAISO and MISO.

Figure 6: Fleet Comparison

Fleet Comparison - By Fuel Type				
% of Operating Capacity	Core Generation	Gen On	CPN	DYN
Gas CCGT	12%	13%	85%	3
Gas CT	9%	6%	8%	1
Gas ST	26%	41%	3%	
Oil	14%	15%	1%	
Coal	33%	25%	0%	4
Nuclear	4%	0%	0%	
Other	0%	0%	3%	
Total	100%	100%	100%	10

Fleet Comparison - By ISO				
% of Operating Capacity	Core Generation	Gen On	CPN	DYN
PJM	20%	59%	19%	4
MISO	13%	5%	3%	2
ISO-NE	6%	7%	8%	1
NYISO	13%	7%	1%	
CAISO	9%	23%	22%	1
ERCOT	39%	0%	36%	
Other	0%	0%	10%	
Total	100%	100%	100%	10

Note: For cost comparison purposes, DYN data excludes the Engie assets

Source: Company Filings, SNL Financial

NRG Energy Inc.

UBS Research

PIVOTAL QUESTIONS

Q: Is the GenOn settlement a good outcome for NRG?

UBS VIEW

return 

We believe the \$150 Mn net cash contribution (\$261 Mn contribution plus ~\$13 Mn pension contribution in 2017, partially offset by the return of \$125 Mn on the revolver) and the assumption of ~\$120 Mn of pension liability as part of the settlement with noteholders is a positive for NRG as that amount is lower than many investors feared given the tangible threats of substantial litigation, notably related to the Shared Services Agreement (see our related note [here](#)) and previous asset transfers. The main question remains the extent to which the company can cope with losing the Shared Services Agreement. While the company remains confident it can offset a significant portion of the loss, it remains unclear how much of these savings would be specific to GenOn or as part of the broader cost evaluation with the BRC (Business Review Committee). Finally, the entitlement to a "worthless stock deduction for federal income tax purposes" would result in NOLs (magnitude TBD), which could provide some upside.

EVIDENCE

The \$150 Mn net cash contribution and ~\$120 Mn of pension liability assumption is substantially lower than the \$729 Mn litigation filed by the GenOn noteholders. In addition, separating from GenOn would avoid ~\$300 Mn/year avg. negative FCF generation under the current structure according to our forecast. Finally, losing the GenOn portfolio would increase NRG's relative exposure to premium-priced ComEd to 84% of PJM capacity, while overall portfolio exposure to ERCOT (the power market on which we are the most constructive – see our ERCOT CDR note [here](#)) from 24% to 39%.

WHAT'S PRICED IN?

NRG's stock price increased by ~\$0.50/Sh since the first GenOn settlement 8K was released on May 23. While the timeline coincides with the results of the PJM auction, making it challenging to isolate the true impact, we believe the market took the announcement positively. The key question remains how much dis-synergy offset does the street believe the company can achieve.

GenOn Projections

We include below our GenOn EBITDA projections. We highlight the degrading profitability profile in the later years, particularly in PJM given the sharp decline in capacity payments, notably in MAAC and PEPCO where the majority of GenOn's fleet is located.

Figure 7: GenOn EBITDA Projections

Gen On EBITDA, by Segment (\$Mn)	2016A	2017E	2018E	2019E	2020E
Eastern PJM	209	70	44	(3)	(55)
Western PJM/MISO	274	(23)	53	2	(30)
California	27	27	27	27	27
Other (New England, NY etc.)	39	69	103	61	36
Energy Marketing/Gas Contracts	2	2	2	2	2
Adj. EBITDA	551	144	228	89	(20)
Adjusted EBITDA Guidance		145			
Plus: Operating Lease Expense	112	112	112	112	112
Adj. EBITDAR	663	256	340	201	92
2016E Net Debt / Adj. EBITDA	2.7x	10.3x	6.5x	16.8x	-74.3x
2016E Net Debt Incl. Leases / Adj. EBITDAR	3.8x	9.8x	7.4x	12.5x	27.4x

Source: Company Filings, UBSe

We also include below our GenOn FCF projections and emphasize the current structure would result in ~\$300 Mn negative FCF generation per year on average.

Figure 8: GenOn FCF Projections

Gen On Free Cash Flow Walk	2017E	2018E	2019E	2020E
Beginning Cash Balance	1,034	738	602	326
Adjusted EBITDA	144	228	89	(20)
Less: Interest Expense	(235)	(235)	(235)	(235)
Less: Other Adjustments	(126)	(50)	(50)	(50)
Less: Total Capex	(79)	(79)	(79)	(79)
Free Cash Flow	(296)	(136)	(276)	(384)
Ending Cash Balance	738	602	326	(58)
FCF Guidance	(300)			

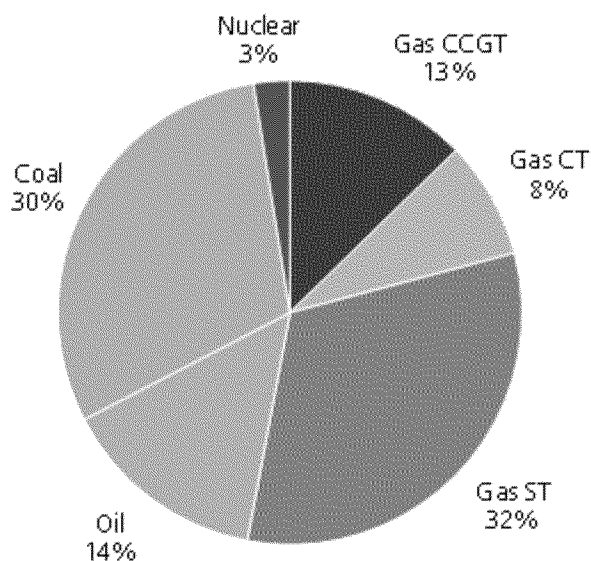
Source: Company Filings, UBSe

What does NRG look like without GenOn?

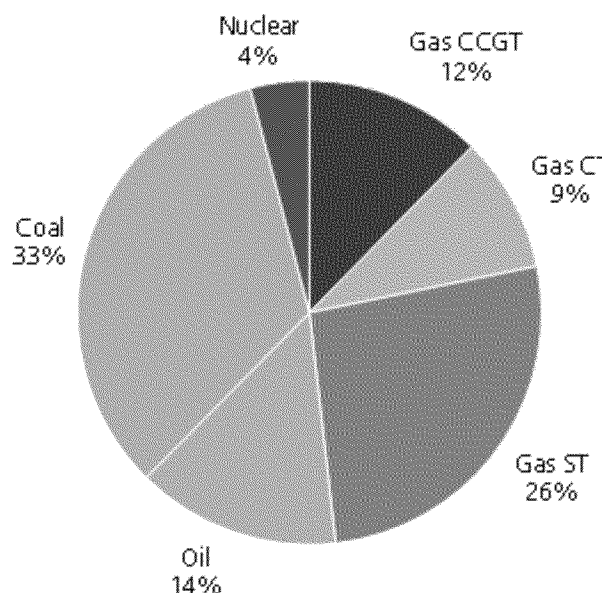
By fuel type: We note the portfolio composition by fuel wouldn't necessarily change much:

Figure 9: Total Capacity by Fuel – With GenOn scenario

Figure 10: Total Capacity by Fuel – Without GenOn scenario



Source: Company Filings, SNL Financial, UBS

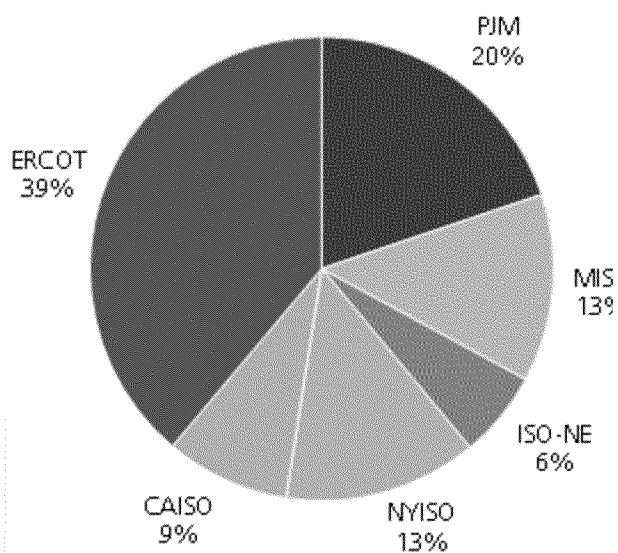
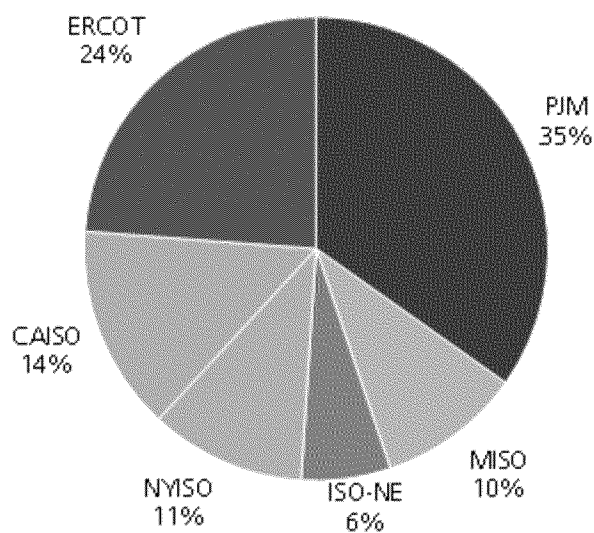


Source: Company Filings, SNL Financial, UBS

By ISO: Without GenOn, NRG's exposure to PJM would decrease significantly from ~35% to ~20%, while the portfolio would become more concentrated in ERCOT, with the TX market accounting for ~39% of capacity vs. ~24% currently.

Figure 11: Total Capacity by ISO – With GenOn scenario

Figure 12: Total Capacity by ISO – Without GenOn scenario

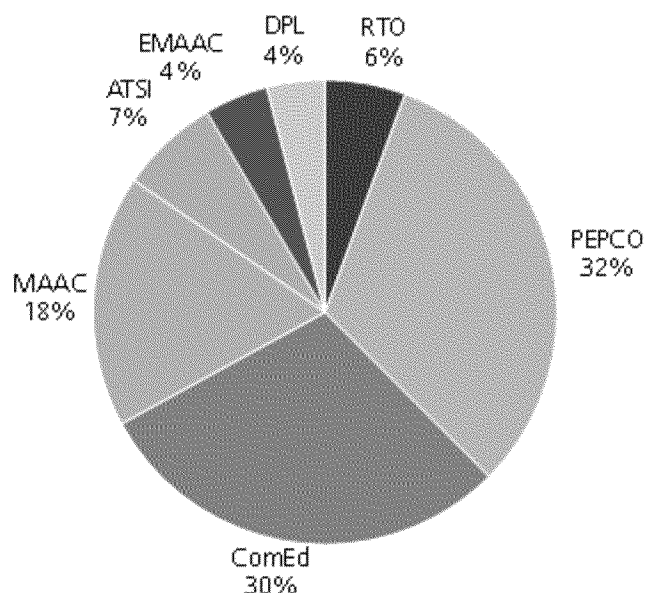


Source: Company Filings, SNL Financial, UBS

Source: Company Filings, SNL Financial, UBS

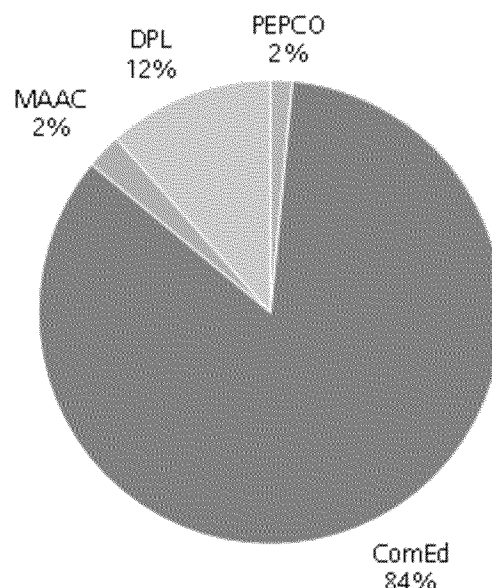
Within PJM: The remaining NRG (ex-GenOn) would then largely become a ComEd play with ~84% of total capacity in this zone vs. only ~30% currently.

Figure 13: PJM Capacity by Zone – With GenOn scenario



Source: Company Filings, SNL Financial, UBS

Figure 14: PJM Capacity by Zone – Without GenOn scenario



Source: Company Filings, SNL Financial, UBS

JULIEN DUMOULIN-SMITH, CFA

Executive Director - Equity Research
Electric Utilities, Alt Energy & IPPs Group
UBS Securities, LLC
1285 Avenue of the Americas
New York, NY 10019
212.713.9848
julien.dumoulin-smith@ubs.com

JERIMIAH BOOREAM, CFA

Associate Director- Equity Research
212.713.4105
jerimiah.booream@ubs.com

ANTOINE AURIMOND, CFA

Equity Research
212.713.1414
antoine.aurimond@ubs.com

NICHOLAS CAMPANELLA

Equity Research
212.713.2851
nicholas.campanella@ubs.com

This report has been prepared by UBS Securities LLC. **ANALYST CERTIFICATION AND REQUIRED DISCLOSURES AT END OF NOTE.** UBS does and seeks to do business with companies covered in its research reports.

As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Statement of Risk

Risks for Utilities and Independent Power Producers (IPPs) primarily relate to volatile commodity prices for power, natural gas, and coal. Risks to IPPs also stem from load variability, and operational risk in running these facilities. Rising coal and, to a certain extent, uranium prices could pressure margins as the fuel hedges roll off Competitive Integrations. Further, IPPs face declining revenues as in the money power and gas hedges roll off. Other non-regulated risks include weather and for some, foreign currency risk, which again must be diligently accounted in the company's risk management operations. Major external factors, which affect our valuation, are environmental risks. Environmental capex could escalate if stricter emission standards are implemented. We believe a nuclear accident or a change in the Nuclear Regulatory Commission/Environment Protection Agency regulations could have a negative impact on our estimates. Risks for regulated utilities include the uncertainty around the composition of state regulatory Commissions, adverse regulatory changes, unfavorable weather conditions, variance from normal population growth, and changes in customer mix. Changes in macroeconomic factors will affect customer additions/subtractions and usage patterns.

Required Disclosures

This report has been prepared by UBS Securities LLC, an affiliate of UBS AG. UBS AG, its subsidiaries, branches and affiliates are referred to herein as UBS.

For information on the ways in which UBS manages conflicts and maintains independence of its research product; historical performance information; and certain additional disclosures concerning UBS research recommendations, please visit www.ubs.com/disclosures. The figures contained in performance charts refer to the past; past performance is not a reliable indicator of future results. Additional information will be made available upon request. UBS Securities Co. Limited is licensed to conduct securities investment consultancy businesses by the China Securities Regulatory Commission. UBS acts or may act as principal in the debt securities (or in related derivatives) that may be the subject of this report.

Analyst Certification: Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers and were prepared in an independent manner, including with respect to UBS, and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

UBS Investment Research: Global Equity Rating Definitions

12-Month Rating	Definition	Coverage ¹	IB Services ²
Buy	FSR is > 6% above the MRA.	45%	28%

Neutral			
Sell	FSR is > 6% below the MRA.	15%	17%
Short-Term	Definition	Coverage³	IB Services⁴
Rating			
Buy	Stock price expected to rise within three months from the time the rating was assigned because of a specific catalyst or event.	less than 1%	less than 1%
Sell	Stock price expected to fall within three months from the time the rating was assigned because of a specific catalyst or event.	less than 1%	less than 1%

Source: UBS. Rating allocations are as of 30 September, 2016
UBS Investment Research Equity Ratings:

(1) Percentage of companies under coverage globally within the 12-month rating category. (2) Percentage of companies within the 12-month rating category for which investment banking (IB) services were provided within the past 12 months. (3) Percentage of companies under coverage globally within the Short-Term rating category. (4) Percentage of companies within the Short-Term rating category for which investment banking (IB) services were provided within the past 12 months.

KEY DEFINITIONS: Forecast Stock Return (FSR) is defined as expected percentage price appreciation plus gross dividend yield over the next 12 months. **Market Return Assumption (MRA)** is defined as the one-year local market interest rate plus 5% (a proxy for, and not a forecast of, the equity risk premium). **Under Review (UR)** Stocks may be flagged as UR by the analyst, indicating that the stock's price target and/or rating are subject to possible change in the near term, usually in response to an event that may affect the investment case or valuation. **Short-Term Ratings** reflect the expected near-term (up to three months) performance of the stock and do not reflect any change in the fundamental view or investment case. **Equity Price Targets** have an investment horizon of 12 months.

EXCEPTIONS AND SPECIAL CASES: UK and European Investment Fund ratings and definitions are: Buy: Positive on factors such as structure, management, performance record, discount; **Neutral:** Neutral on factors such as structure, management, performance record, discount; **Sell:** Negative on factors such as structure, management, performance record, discount. **Core Banding Exceptions (CBE):** Exceptions to the standard +/-6% bands may be granted by the Investment Review Committee (IRC). Factors considered by the IRC include the stock's volatility and the credit spread of the respective company's debt. As a result, stocks deemed to be very high or low risk may be subject to higher or lower bands as they relate to the rating. When such exceptions apply, they will be identified in the Company Disclosures table in the relevant research piece.

Research analysts contributing to this report who are employed by any non-US affiliate of UBS Securities LLC are not registered/qualified as research analysts with the NASD and NYSE and therefore are not subject to the restrictions contained in the NASD and NYSE rules on communications with a subject company, public appearances, and trading securities held by a

research analyst account. The name of each affiliate and analyst employed by that affiliate contributing to this report, if any, follows.

UBS Securities LLC: Julien Dumoulin-Smith; Jerimiah Booream

Unless otherwise indicated, please refer to the Valuation and Risk sections within the body of this report.

Global Disclaimer

This document has been prepared by UBS AG, an affiliate of UBS AG. UBS AG, its subsidiaries, branches and affiliates are referred to herein as UBS.

Global Research is provided to our clients through UBS Neo and, in certain instances, UBS.com (each a "System"). It may also be made available through third party vendors and distributed by UBS and/or third parties via e-mail or alternative electronic means. The level and types of services provided by Global Research to a client may vary depending upon various factors such as a client's individual preferences as to the frequency and manner of receiving communications, a client's risk profile and investment focus and perspective (e.g., market wide, sector specific, long-term, short-term, etc.), the size and scope of the overall client relationship with UBS and legal and regulatory constraints.

All Global Research is available on UBS Neo. Please contact your UBS sales representative if you wish to discuss your access to UBS Neo.

When you receive Global Research through a System, your access and/or use of such Global Research is subject to this Global Research Disclaimer and to the terms of use governing the applicable System.

When you receive Global Research via a third party vendor, e-mail or other electronic means, your use shall be subject to this Global Research Disclaimer and to UBS's Terms of Use/Disclaimer (<http://www.ubs.com/global/en/legalinfo2/disclaimer.html>). By accessing and/or using Global Research in this manner, you are indicating that you have read and agree to be bound by our Terms of Use/Disclaimer. In addition, you consent to UBS processing your personal data and using cookies in accordance with our Privacy Statement (<http://www.ubs.com/global/en/legalinfo2/privacy.html>) and cookie notice (<http://www.ubs.com/global/en/homepage/cookies/cookie-management.html>).

If you receive Global Research, whether through a System or by any other means, you agree that you shall not copy, revise, amend, create a derivative work, transfer to any third party, or in any way commercially exploit any UBS research provided via Global Research or otherwise, and that you shall not extract data from any research or estimates provided to you via Global Research or otherwise, without the prior written consent of UBS.

This document is for distribution only as may be permitted by law. It is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or would subject UBS to any registration or licensing requirement within such jurisdiction. It is published solely for information purposes; it is not an advertisement nor is it a solicitation or an offer to buy or sell any financial instruments or to participate in any particular trading strategy. No representation or warranty, either expressed or implied, is provided in relation to the accuracy, completeness or reliability of the information contained in this document ("the Information"), except with respect to Information concerning UBS. The Information is not intended to be a complete statement or summary of the securities, markets or developments referred to in the document. UBS does not undertake to update or keep current the Information. Any opinions expressed in this document may change without notice and may differ or be contrary to opinions expressed by other business areas or groups of UBS. Any statements contained in this report attributed to a third party represent UBS's interpretation of the data, information and/or opinions provided by that third party either publicly or through a subscription service, and such use and interpretation have not been reviewed by the third party.

Nothing in this document constitutes a representation that any investment strategy or recommendation is suitable or appropriate to an investor's individual circumstances or otherwise constitutes a personal recommendation. Investments involve risks, and investors should exercise prudence and their own judgement in making their investment decisions. The financial instruments described in the document may not be eligible for sale in all jurisdictions or to certain categories of investors. Options, derivative products and futures

are not suitable for all investors, and trading in these instruments is considered risky. Mortgage and asset-backed securities may involve a high degree of risk and may be highly volatile in response to fluctuations in interest rates or other market conditions. Foreign currency rates of exchange may adversely affect the value, price or income of any security or related instrument referred to in the document. For investment advice, trade execution or other enquiries, clients should contact their local sales representative.

The value of any investment or income may go down as well as up, and investors may not get back the full (or any) amount invested. Past performance is not necessarily a guide to future performance. Neither UBS nor any of its directors, employees or agents accepts any liability for any loss (including investment loss) or damage arising out of the use of all or any of the Information.

Any prices stated in this document are for information purposes only and do not represent valuations for individual securities or other financial instruments. There is no representation that any transaction can or could have been effected at those prices, and any prices do not necessarily reflect UBS's internal books and records or theoretical model-based valuations and may be based on certain assumptions. Different assumptions by UBS or any other source may yield substantially different results.

This document and the Information are produced by UBS as part of its research function and are provided to you solely for general background information. UBS has no regard to the specific investment objectives, financial situation or particular needs of any specific recipient. In no circumstances may this document or any of the Information be used for any of the following purposes:

- (i) valuation or accounting purposes;
- (ii) to determine the amounts due or payable, the price or the value of any financial instrument or financial contract; or
- (iii) to measure the performance of any financial instrument.

By receiving this document and the Information you will be deemed to represent and warrant to UBS that you will not use this document or any of the Information for any of the above purposes or otherwise rely upon this document or any of the Information.

UBS has policies and procedures, which include, without limitation, independence policies and permanent information barriers, that are intended, and upon which UBS relies, to manage potential conflicts of interest and control the flow of information within divisions of UBS and among its subsidiaries, branches and affiliates. For further information on the ways in which UBS manages conflicts and maintains independence of its research products, historical performance information and certain additional disclosures concerning UBS research recommendations, please visit www.ubs.com/disclosures.

Research will initiate, update and cease coverage solely at the discretion of UBS Investment Bank Research Management, which will also have sole discretion on the timing and frequency of any published research product. The analysis contained in this document is based on numerous assumptions. All material information in relation to published research reports, such as valuation methodology, risk statements, underlying assumptions (including sensitivity analysis of those assumptions), ratings history etc. as required by the Market Abuse Regulation, can be found on NEO. Different assumptions could result in materially different results.

The analyst(s) responsible for the preparation of this document may interact with trading desk personnel, sales personnel and other parties for the purpose of gathering, applying and interpreting market information. UBS relies on information barriers to control the flow of information contained in one or more areas within UBS into other areas, units, groups or affiliates of UBS. The compensation of the analyst who prepared this document is determined exclusively by research management and senior management (not including investment banking). Analyst compensation is not based on investment banking revenues; however, compensation may relate to the revenues of UBS Investment Bank as a whole, of which investment banking, sales and trading are a part, and UBS's subsidiaries, branches and affiliates as a whole.

For financial instruments admitted to trading on an EU regulated market: UBS AG, its affiliates or subsidiaries (excluding UBS Securities LLC) acts as a market maker or liquidity provider (in accordance with the interpretation of these terms in the UK) in the financial instruments of the issuer save that where the activity of liquidity provider is carried out in accordance with the definition given to it by the laws and regulations of any other EU jurisdictions, such information is separately disclosed in this document. For financial instruments admitted to trading on a non-EU regulated market: UBS may act as a market maker save that where this activity is carried out in the US in accordance with the definition given to it by the relevant laws and regulations, such activity will be specifically disclosed in this document. UBS may have issued a warrant the value of which is based on one or more of the financial instruments referred to in the document. UBS and its affiliates and employees may have long or short positions, trade as principal and buy and sell in instruments or derivatives identified herein; such transactions or positions may be inconsistent with the opinions expressed in this document.

United Kingdom and the rest of Europe: Except as otherwise specified herein, this material is distributed by UBS Limited to persons who are eligible counterparties or professional clients. UBS Limited is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. **France:** Prepared by UBS Limited and distributed by UBS Limited and UBS Securities France S.A. UBS Securities France S.A. is regulated by the ACPR (Autorité de Contrôle Prudentiel et de Résolution) and the Autorité des Marchés Financiers (AMF). Where an analyst of UBS Securities France S.A. has contributed to this document, the document is also deemed to have been prepared by UBS Securities France S.A. **Germany:** Prepared by UBS Limited and distributed by UBS Limited and UBS Europe SE. UBS Europe SE is regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin). **Spain:** Prepared by UBS Limited and distributed by UBS Limited and UBS Securities España SV, SA. UBS Securities España SV, SA is regulated by the Comisión Nacional del Mercado de Valores (CNMV). **Turkey:** Distributed by UBS Limited. No information in this document is provided for the purpose of offering, marketing and sale by any means of any capital market instruments and services in the Republic of Turkey. Therefore, this document may not be considered as an offer made or to be made to residents of the Republic of Turkey. UBS AG is not licensed by the Turkish Capital Market Board under the provisions of the Capital Market Law (Law No. 6362). Accordingly, neither this document nor any other offering material related to the instruments/services may be utilized in connection with providing any capital market services to persons within the Republic of Turkey without the prior approval of the Capital Market Board. However, according to article 15 (d) (ii) of the Decree No. 32, there is no restriction on the purchase or sale of the securities abroad by residents of the Republic of Turkey. **Poland:** Distributed by UBS Limited (spółka z ograniczoną odpowiedzialnością) Oddział w Polsce regulated by the Polish Financial Supervision Authority. Where an analyst of UBS Limited (spółka z ograniczoną odpowiedzialnością) Oddział w Polsce has contributed to this document, the document is also deemed to have been prepared by UBS Limited (spółka z ograniczoną odpowiedzialnością) Oddział w Polsce. **Russia:** Prepared and distributed by UBS Bank (OOO). **Switzerland:** Distributed by UBS AG to persons who are institutional investors only. UBS AG is regulated by the Swiss Financial Market Supervisory Authority (FINMA). **Italy:** Prepared by UBS Limited and distributed by UBS Limited and UBS Limited, Italy Branch. Where an analyst of UBS Limited, Italy Branch has contributed to this document, the document is also deemed to have been prepared by UBS Limited, Italy Branch. **South Africa:** Distributed by UBS South Africa (Pty) Limited (Registration No. 1995/011140/07), an authorised user of the JSE and an authorised Financial Services Provider (FSP 7328). **Israel:** This material is distributed by UBS Limited. UBS Limited is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. UBS Securities Israel Ltd is a licensed Investment Marketer that is supervised by the Israel Securities Authority (ISA). UBS Limited and its affiliates incorporated outside Israel are not licensed under the Israeli Advisory Law. UBS Limited is not covered by insurance as required from a licensee under the Israeli Advisory Law. UBS may engage among others in issuance of Financial Assets or in distribution of Financial Assets of other issuers for fees or other benefits. UBS Limited and its affiliates may prefer various Financial Assets to which they have or may have Affiliation (as such term is defined under the Israeli Advisory Law). Nothing in this Material should be considered as investment advice under the Israeli Advisory Law. This Material is being issued only to and/or is directed only at persons who are Eligible Clients within the meaning of the Israeli Advisory Law, and this material must not be relied on or acted upon by any other persons. **Saudi Arabia:** This document has been issued by UBS AG (and/or any of its subsidiaries, branches or affiliates), a public company limited by shares, incorporated in Switzerland with its registered offices at Aeschenvorstadt 1, CH-4051 Basel and Bahnhofstrasse 45, CH-8001 Zurich. This publication has been approved by UBS Saudi Arabia (a subsidiary of UBS AG), a Saudi closed joint stock company incorporated in the Kingdom of Saudi Arabia under commercial register number 1010257812 having its registered office at Tatweer Towers, P.O. Box 75724, Riyadh 11588, Kingdom of Saudi Arabia. UBS Saudi Arabia is authorized and regulated by the Capital Market Authority to conduct securities business under license number 08113-37. **Dubai:** The information distributed by UBS AG Dubai Branch is intended for Professional Clients only and is not for further distribution within the United Arab Emirates. **United States:** Distributed to US persons by either UBS Securities LLC or by UBS Financial Services Inc., subsidiaries of UBS AG; or by a group, subsidiary or affiliate of UBS AG that is not registered as a US broker-dealer (a "non-US affiliate") to major US institutional investors only. UBS Securities LLC or UBS Financial Services Inc. accepts responsibility for the content of a document prepared by another non-US affiliate when distributed to US persons by UBS Securities LLC or UBS Financial Services Inc. All transactions by a US person in the securities mentioned in this document must be effected through UBS Securities LLC or UBS Financial Services Inc., and not through a non-US affiliate. UBS Securities LLC is not acting as a municipal advisor to any municipal entity or obligated person within the meaning of Section 15B of the Securities Exchange Act (the "Municipal Advisor Rule"), and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of the Municipal Advisor Rule. **Canada:** Distributed by UBS Securities Canada Inc., a registered investment dealer in Canada and a Member-Canadian Investor Protection Fund, or by another affiliate of UBS AG that is registered to conduct business in Canada or is otherwise exempt from registration. **Mexico:** This report has been distributed and prepared by UBS Casa de Bolsa, S.A. de C.V., UBS Grupo Financiero, an entity that is part of UBS Grupo Financiero, S.A. de C.V. and is an affiliate of UBS AG. This document is intended for distribution to institutional or sophisticated investors only. Research reports only reflect the views of the analysts responsible for the reports. Analysts do not receive any compensation from persons or entities different from UBS Casa de Bolsa, S.A. de C.V., UBS Grupo Financiero, or different from entities belonging to the same financial group or business group of such. For Spanish translations of applicable disclosures, please see www.ubs.com/disclosures. **Brazil:** Except as otherwise specified herein, this material is prepared by UBS Brasil CCTVM S.A. to persons who are eligible investors residing in Brazil, which are considered to be: (i) financial institutions, (ii) insurance firms and investment capital companies, (iii) supplementary pension entities, (iv) entities that hold financial investments higher than R\$300,000.00 and that confirm the status of qualified investors in written, (v) investment funds, (vi) securities portfolio managers and securities consultants duly authorized by Comissão de Valores Mobiliários (CVM), regarding their own investments, and (vii) social security systems created by the Federal Government, States, and Municipalities. **Hong Kong:** Distributed by UBS Securities Asia Limited and/or UBS AG, Hong Kong Branch. **Singapore:** Distributed by UBS Securities Pte. Ltd. [MCI (P) 007/09/2016 and Co. Reg. No.: 198500648C] or UBS AG, Singapore Branch. Please contact UBS Securities Pte. Ltd., an exempt financial adviser under the Singapore Financial Advisers Act (Cap. 110); or UBS AG, Singapore Branch, an exempt financial adviser under the Singapore Financial Advisers Act (Cap. 110) and a wholesale bank licensed under the Singapore Banking Act (Cap. 19) regulated by the Monetary Authority of Singapore, in respect of any matters arising from, or in connection with, the analysis or document. The recipients of this document represent and warrant that they are accredited and institutional investors as defined in the Securities and Futures Act (Cap. 289). **Japan:** Distributed by UBS Securities Japan Co., Ltd. to professional investors (except as otherwise permitted). Where this document has been prepared by UBS Securities Japan Co., Ltd., UBS Securities Japan Co., Ltd. is the author, publisher and distributor of the document. Distributed by UBS AG, Tokyo Branch to Professional Investors (except as otherwise permitted) in relation to foreign exchange and other banking businesses when relevant. **Australia:** Clients of UBS AG: Distributed by UBS AG (Holder of Australian Financial Services License No. 231087). Clients of UBS Securities Australia Ltd: Distributed by UBS Securities Australia Ltd (Holder of Australian Financial Services License

No. 231098). This Document contains general information and/or general advice only and does not constitute personal financial product advice. As such, the Information in this document has been prepared without taking into account any investor's objectives, financial situation or needs, and investors should, before acting on the Information, consider the appropriateness of the Information, having regard to their objectives, financial situation and needs. If the Information contained in this document relates to the acquisition, or potential acquisition of a particular financial product by a 'Retail' client as defined by section 761G of the Corporations Act 2001 where a Product Disclosure Statement would be required, the retail client should obtain and consider the Product Disclosure Statement relating to the product before making any decision about whether to acquire the product. The UBS Securities Australia Limited Financial Services Guide is available at: www.ubs.com/ecs-research-fsg. **New Zealand:** Distributed by UBS New Zealand Ltd. UBS New Zealand Ltd is not a registered bank in New Zealand. The information and recommendations in this publication are provided for general information purposes only. To the extent that any such information or recommendations constitute financial advice, they do not take into account any person's particular financial situation or goals. We recommend that recipients seek advice specific to their circumstances from their financial advisor. **Korea:** Distributed in Korea by UBS Securities Pte. Ltd., Seoul Branch. This document may have been edited or contributed to from time to time by affiliates of UBS Securities Pte. Ltd., Seoul Branch.

Malaysia: This material is authorized to be distributed in Malaysia by UBS Securities Malaysia Sdn. Bhd (Capital Markets Services License No.: CMSL/A0063/2007). This material is intended for professional/institutional clients only and not for distribution to any retail clients. **India:** Distributed by UBS Securities India Private Ltd. (Corporate Identity Number U67120MH1996PTC097299) 2/F, 2 North Avenue, Maker Maxity, Bandra Kurla Complex, Bandra (East), Mumbai (India) 400051. Phone: +912261556000. It provides brokerage services bearing SEBI Registration Numbers: NSE (Capital Market Segment): INB230951431, NSE (F&O Segment) INF230951431, NSE (Currency Derivatives Segment) INE230951431, BSE (Capital Market Segment) INB010951437; merchant banking services bearing SEBI Registration Number: INM000010809 and Research Analyst services bearing SEBI Registration Number: INH000001204. UBS AG, its affiliates or subsidiaries may have debt holdings or positions in the subject Indian company/companies. Within the past 12 months, UBS AG, its affiliates or subsidiaries may have received compensation for non-investment banking securities-related services and/or non-securities services from the subject Indian company/companies. The subject company/companies may have been a client/clients of UBS AG, its affiliates or subsidiaries during the 12 months preceding the date of distribution of the research report with respect to investment banking and/or non-investment banking securities-related services and/or non-securities services. With regard to information on associates, please refer to the Annual Report at: http://www.ubs.com/global/en/about_ubs/investor_relations/annualreporting.html

The disclosures contained in research documents produced by UBS Limited shall be governed by and construed in accordance with English law.

UBS specifically prohibits the redistribution of this document in whole or in part without the written permission of UBS and UBS accepts no liability whatsoever for the actions of third parties in this respect. Images may depict objects or elements that are protected by third party copyright, trademarks and other intellectual property rights. © UBS 2016. The key symbol and UBS are among the registered and unregistered



trademarks of UBS. All rights reserved.